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|----------------------------------|-------------|--------------------------|---------------------|------------------|
| APPLICATION NO.                  | FILING DATE | FIRST NAMED INVENTOR     | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 10/594,666                       | 09/28/2006  | Geoffrey George Campbell | 3638-896 (AMK)      | 2311             |
| 23117                            | 7590        | 06/02/2010               | EXAMINER            |                  |
| NIXON & VANDERHYE, PC            |             |                          | CAHN, DANIEL P      |                  |
| 901 NORTH GLEBE ROAD, 11TH FLOOR |             |                          | ART UNIT            | PAPER NUMBER     |
| ARLINGTON, VA 22203              |             |                          | 3634                |                  |
| MAIL DATE                        |             | DELIVERY MODE            |                     |                  |
| 06/02/2010                       |             | PAPER                    |                     |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|                              |                                      |  |
|------------------------------|--------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/594,666 | <b>Applicant(s)</b><br>CAMPBELL ET AL. |
|                              | <b>Examiner</b><br>DANIEL CAHN       | <b>Art Unit</b><br>3634                |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on **24 March 2010**.
- 2a) This action is **FINAL**.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) **1-20,22 and 23** is/are pending in the application.
- 4a) Of the above claim(s) **3,7,8,-16,19,22,23** is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) **1,2,4-6,17,18 and 20** is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/06)  
 Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_

**DETAILED ACTION**

**Continuing Data**

Acknowledgement that this case is the 371 of PCT claiming benefit of 60/565524 dating to 04/27/2004 has been made and the document has been received and filed.

***Information Disclosure Statement***

The information disclosure statement has been received and considered and a copy has been placed in the file.

***Lack of Unity***

Claims 7-12, 14-16 and 22, 23 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 09/09/2009. The applicant has therefore elected Species 3, drawn solely to Fig.'s 13 and 19. Examiner is further withdrawing applicants elected claims of 3, 13 and 19 for not being drawn to the elected Species. Nowhere in the specification does it refer to Fig. 13 and 19 and mention or depicted foldable rails or a telescoping mast. Therefore claims 1, 2, 4-6, 17, 18, 20, 21 and 24 are hereinafter the claims to be examined.

This Restriction/Election has been Made Final.

***Claim Rejections - 35 USC § 102/103***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 20 is rejected under 35 U.S.C. 102(b) as being anticipated by Thevenot (US 3752263), or in the alternative claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thevenot (US 3752263).

Regarding claim 20, Thevenot teaches a **mast lift** (Fig. 1) for personnel configurable [capable of being configured] **with a plurality of independent components, the independent components comprising:**

**a base unit including a mast** (which could be interpreted as all of the vertical framework 14 or it could be interpreted as simply as the single pole 15A Fig. 1), **a stand** (11, 12; Fig. 4) **and a platform lifting system** (Fig. 5);

**a personnel work platform** (18; Fig. 1 or 2) **attachable** [capable of being attached] **to the base unit; and**

**a power pack** (as seen by motor 27) **engageable** [able to engage] **with the platform lifting system** (as depicted in Fig.'s), **wherein the mast lift is a portable stand-alone unit, either free-standing or supportable** [capable of being supported] **against a support surface** (such as a floor), **and wherein a machine weight of the assembled mast lift is less than 200 pounds** (examiner notes that as claimed, the "a machine weight of the assembled mast lift" could be interpreted as any element which is

inherently less than 200 pounds on the lift of Fig. 1; to explain more clearly, the wheel at 13 or the back post 15 in fig. 2, etc... are inherently 'a weight' respectively and inherently use their weight to provide a counterbalance to the platform lift).

However, in the alternative, if it is found that "a machine weight" can not be interpreted as an element of the system in Fig. 1, all of the elements of the instant invention are discussed in detail above except providing the machine weight of the mast lift as weighing less than 200 pounds. However, attention shall be drawn to the fact that it would have been an obvious matter of engineering design to a person of ordinary skill in the art to provide the machine weight of the mast lift as less than 200 pounds since discovering an optimum weight would have been a mere design consideration based on the characteristics of the material and/or amount of the material used. Such a modification of a material (such as a material lighter in weight and/or changing the dimensions (amount of material used via thickness, length, tubular, etc...) would have involved only routine skill in the art to accommodate different weight requirements depending on the desired characteristics of the mast, whether the desired characteristics are to enable the user to have the well known in the art ability of making the object easier to assemble and/or making the object easier to transport. Examiner further notes that it is not a novel concept or inventive idea to make a modular item lighter by using a lighter material and/or less material (via the dimension of the support beams/rods/etc; such as making the beams tubular or thinning the thickness, lengths or widths, etc.) in order to make the modular item easier to move and/or assemble. It has

been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4-6, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thevenot (US 3752263).

First, the independent claims of 1 and 20,

Regarding claim 1, Thevenot teaches **a mast lift for personnel comprising:**

**a mast** (which could be interpreted as all of the vertical framework, 14 or it could be interpreted as simple as the single pole 15A Fig. 1);

**a personnel work platform** (18; Fig. 1 or 2) **movably secured to the mast** (as depicted in Fig. 5); **and a lift system** (Fig. 5) **coupled between the work platform and the mast, the lift system effecting raising and lowering of the work platform on the mast, wherein the mast lift is a portable stand-alone unit** (as seen by the wheels 13; Fig. 1 or 2), **either free-standing or supportable** [capable of being supported] **against a support surface** (such as a ground/floor).

All of the elements of the instant invention are discussed in detail above except providing the machine weight of the mast lift as weighing less than 200 pounds.

However, attention shall be drawn to the fact that it would have been an obvious matter of design choice to a person of ordinary skill in the art to provide the machine weight of the mast lift as less than 200 pounds since discovering an optimum weight would have been a mere design consideration based on the characteristics of the material and/or amount of the material used. Such a modification of a material (such as a material lighter in weight and/or changing the dimensions (amount of material used via thickness, length, tubular, etc...)) would have involved only routine skill in the art to accommodate different weight requirements depending on the desired characteristics of the mast, whether the desired characteristics are to enable the user to have the well known in the art ability of making the object easier to assemble and/or making the object easier to transport. Examiner further notes that it is not a novel concept or inventive idea to make a modular item lighter by using a lighter material and/or less material (via the dimension of the support beams/rods/etc; such as making the beams tubular or thinning the thickness, lengths or widths, etc.) in order to make the modular item easier to move and/or assemble. It has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

**Regarding claim 2, the work platform comprises a safety rail (22; Fig. 2) at least partially about its perimeter.**

**Regarding claim 4, the lift system is coupleable [capable of being coupled] with a power source (as seen by the motor 27 in Fig. 2).**

Regarding claims 17, 18 and 21, all of the elements of the instant invention are discussed in detail above except providing the machine weight of the mast lift as less than 120, 150 pounds. However, attention shall be drawn to the fact that it would have been an obvious matter of design choice to a person of ordinary skill in the art to provide the machine weight of the mast lift as less than 120/150 pounds since discovering an optimum weight would have been a mere design consideration based on the characteristics of the material and/or amount of the material used. Such a modification of a material (such as a material lighter in weight and/or changing the dimensions (amount of material used via thickness, length, tubular, etc...)) would have involved only routine skill in the art to accommodate different weight requirements depending on the desired characteristics of the mast, whether the desired characteristics are to enable the user to have the well known in the art ability of making the object easier to assemble and/or making the object easier to transport. Examiner further notes that it is not a novel concept or inventive idea to make a modular item lighter by using a lighter material and/or less material (via the dimension of the support beams/rods/etc; such as making the beams tubular or thinning the thickness, lengths or widths, etc.) in order to make the modular item easier to move and/or assemble. It has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Claims 5 and 6 are further rejected under 35 U.S.C. 103(a) as being unpatentable over Thevenot as applied to claim 4 above, and further in view of Martin (US 5522583).

Regarding claims 5 and 6, all of the elements of the instant invention are discussed in detail above except providing that **the power source comprise of a battery pack or hand-held drill**. Attention is therefore directed toward Martin which teaches a similar user operated power driven element (in this case a jack or lift) which has a drive motor that can be an electric drill with chuck removed and the eccentric carrying shaft substituted, with an intrinsic rechargeable battery (battery pack). It would have been obvious to one of ordinary skill in the art at the time of the invention to have been substituted the user operated motor of Thevenot with a user operated power source such as a hand held drill having a battery pack or a batter pack in order to provide the user with multiple options and means in which to drive a driveable elements such as a moveable work platform.

Regarding claims 5 and 6, examiner takes Official Notice that it would have been obvious to one of ordinary skill in the art at the time of the invention to have substituted the motor used Thevenot with a different type of power source such as a battery pack or hand-held drill since it is well known for any power source to be substituted for another to accomplish the same goal or outcome.

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- mounting the power delivery mechanism on the original jack. Jacks of different capacities are often best served by frames of different configurations. The drive motor can be an electric drill with chuck removed and the eccentric carrying shaft substituted, with in intrinsic rechargeable battery or power supply cord, but the arrangement shown is preferred. The electric motor and gear box combination is known as a gear motor and is commercially available for either utility AC power or direct current (DC). If a DC motor is used it can be connected by a cord to a vehicle type battery or to a portable rechargeable pack, preferably combined with switch controls.

### *Response to Arguments*

Applicant's arguments filed 03/24/2010 have been fully considered but they are not persuasive. The Applicant contends that it would not be obvious to one of ordinary skill in the art to design the Prior Art above of Thevenot with a weight of less than 200 pound and provides as evidence in the final page of the arguments that changing the material from steel to aluminum would not place the weight of the lift of Thevenot under the claimed 200 pounds.

The Examiner contends this notion that it would not be obvious on numerous levels. The first point of contention highlights the non valid nature of the table and the fact that the table in final page of the arguments does not provide elements necessary to review it for validity. A few non-limiting examples of the inability to review the table

include: it does not provide unit of measurements for the area, length and volume column found in columns 7, documented labels describing how the areas and lengths were estimated and it does not state what type of aluminum and steel are being used (examiner strongly asserts there are numerous alloys of aluminum and steel with different weight/densities in which to calculate the weight of a structure; the Applicant has only assumed 1 (unknown) aluminum and steel. Further, if an alloy is chosen that is stronger than steel, for example, a Titanium alloy, then less material would be used. As for the validity of the table: the numbers do not even seem to add up correctly and the formula used is questionable - for example, in the box stating .0085 found in column 7 ( $A_1+A_2$ )xLength and row 1 (tower verticals -Lshape) - what length is being used here? shouldn't there be at least two lengths? Also, according to the formula, column 3 ( $A_1$ ) is added column 4 ( $A_2$ ) and multiplied by the already questionable length (assume column 5), yet it does not end in the volume recited in the box of column 7. In conclusion, with reference to the table, it is found to be non-persuasive.

However, assuming the table was valid, the examiner would rebut the Applicant's contention that it would not have been obvious to one of ordinary skill in the art to provide a design change to make the mast lift assembly less than 200 pounds. It is well known in many, if not all mechanical arts, including the arts of class 182 that providing a lighter material or even changing the shape/design of the material by thinning out the widths, thickness or shortening the lengths of a structure (such as a beam) in order to reduce weight, whether it for the ease of transportation, assembly, price, or something else. With respect to the material, something such as aluminum, titanium, a magnesium

alloy [which is known to be significantly lighter than aluminum], or any other material including lighter polymers can be used separately or in combination with changing the shape/design of the material/element so as to reduce the amount used for cost purposes or weight reduction purposes. Using 1 or both of these forms of lightening an apparatus is well documented in the art for many reasons including cost shaving, assembly or transportation easing.

Even another place for rejection with a noted viewpoint is that it would have been obvious to one of ordinary skill in the art at the time of the invention to have changed the shape of the apparatus by shortening the height of the lift assembly or even by shrinking the assembly in scale (in affect significantly reducing the weight). Absent some showing of criticality, the claimed shapes/heights are nothing more than several of numerous shapes a person of ordinary skill in the art would find obvious for the purpose of reaching different heights. *In re Dailey* 149 USPQ 47 (CCPA 1976). Further, changes in size or shape without special functional significance area not patentable. *Research Corp.v. Nasco Industries, Inc.*, 501 F2d 358; 182 USPQ 449 (CA 7) cert. Denied 184 USPQ 193; 43 USLW 3359 (1974). It is well known tat using different height for an apparatus is not a "special functional significance" so as to be patentable.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL CAHN whose telephone number is (571)270-5616. The examiner can normally be reached on Monday through Friday (9 a. m. to 5 p.m.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Katherine Mitchell can be reached on 571-272-7069. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DANIEL CAHN/  
Examiner, Art Unit 3634

/KATHERINE W MITCHELL/

Supervisory Patent Examiner, Art Unit 3634